

Remarks

Reconsideration of this Application is respectfully requested.

Claims 32 and 34-53 are pending in the application, with claims 32, 34, 40, 43, and 51 being the independent claims. Claims 1-31 and 33 were previously cancelled.

Based on the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowable Subject Matter

Applicant acknowledges with gratitude the Examiner's allowance of claims 32 and 34-39.

Statement of Substance of Interview

Applicant's attorney thanks Examiner Duong for extending the courtesy of a telephone interview on October 23, 2008 regarding the present application. Contrary to the Interview Summary (Form PTOL-413) mailed by the USPTO on October 31, 2008, however, the telephone interview was between Robert Sokohl, Attorney for the Applicant, and Examiner Duong. Thomas J. Kolze did not participate in the interview. Applicant's attorney identified himself during the phone call, reciting his name and the name of his law firm.

Regarding the substance of the interview, Applicant's attorney discussed the Office Action dated August 22, 2008. Applicant's attorney referred the Examiner to

Reply to Office Action of August 22, 2008

Thomas J. KOLZE
Appl. No. 09/737,276

MPEP 608 and 37 C.F.R. § 1.57. The Examiner requested that Applicant's attorney submit all remarks and arguments in this reply.

General Remarks

The Examiner asserts that "incorporation by reference of the DOCSIS specification is improper" because it is essential matter. (Office Action, page 6). On this basis, the Examiner concludes that Applicant cannot "assert the support for the newly added subject matters (specification, drawing and claims)." (Office Action, page 5). Applicant respectfully disagrees.

Applicant agrees with the Examiner that essential matter from a non-patent publication (e.g., the DOCSIS specification) cannot be properly incorporated by reference. (37 C.F.R. § 1.57(c)). The MPEP and the C.F.R. provide a mechanism, however, by which Applicant may correct an improper incorporation by reference. Essential matter may be inserted by amendment into the Specification and Drawings under 37 C.F.R. § 1.57(f) so long as Applicant has satisfied the requirements of 37 C.F.R. § 1.57(b). In particular, the specification upon filing must clearly identify a publication and express a clear intent to incorporate by reference the publication. Applicant has satisfied both prongs of the rule. See, e.g., page 1 of the Specification as filed (incorporating by reference the DOCSIS specification versions 1.0 and 1.1).

The MPEP provides an example of when an improper incorporation by reference is required to be corrected:

Upon review of the specification, the examiner determined that the subject matter incorporated by reference from a foreign patent was "nonessential material" and therefore, did not object to the incorporation by reference. In reply to a non-final Office action, applicant filed an

amendment to the claims to add a new limitation that was supported by the foreign patent. The amendment filed by the applicant caused the examiner to re-determine that the incorporated subject matter was "essential material" under 37 C.F.R. § 1.57(c). The examiner rejected the claims that include the new limitation under 35 U.S.C. § 112, first paragraph, in a final Office Action.

M.P.E.P. § 608.01(p). The foreign patent used in the example above is similar to Applicant's incorporation by reference of a non-patent publication, i.e., the DOCSIS specification. See 37 C.F.R. § 1.57(d). The MPEP further states that the applicant can overcome the rejection by filing an amendment to add the subject material from the foreign patent under 37 C.F.R. § 1.57(f). MPEP 608.01(p) ("Any underlying objection or rejection (e.g., under 35 U.S.C. 112) should be made by the examiner *until applicant corrects the improper incorporation by reference by submitting an amendment to amend the specification or drawings to include the material incorporated by reference.* A statement that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter is also required.").

Applicant amended the specification in accordance with 37 C.F.R. § 1.57(f) in response to the Examiner's 112, first paragraph rejection. 37 C.F.R. § 1.57(f) states:

(f) Any insertion of material incorporated by reference into the specification or drawings of an application must be by way of an amendment to the specification or drawings. Such an amendment must be accompanied by a statement that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter.

Applicant has properly inserted material (i.e., the DOCSIS specification) into the specification previously incorporated by reference in accordance with 37 C.F.R. § 1.57(f). Therefore, Applicant no longer relies on any material improperly incorporated

by reference to support the claims. All essential material has been inserted into the specification by previous amendments.

Objection to the Specification and Drawings

The Amendments to the Specification and Drawings of April 16, 2007 are objected to as allegedly being new material. Applicant respectfully traverses.

The Examiner asserts that the “responses to the arguments filed 4/16/07 dated 7/18/07 are still applicable.” (Office Action, August 22, 2008, page 5). In the July 18, 2007 Office Action, the Examiner asserted that

“Applicant’s attempt to amend the specification by adding new matter in the specification and in the drawings of Figures 14-17 has inadvertently introduced new matter that is not fully supported by the original specification. . . . Applicant is reminded that the patent application is not that dynamic. The subject matters deviated from that originally filed cannot be introduced to overcome the outstanding rejection or as applicant desired.

(Office Action, July 18, 2007, page 8). As discussed above, however, under 37 C.F.R. § 1.57(f) and MPEP § 608.01(p), Applicant may insert material into the Specification that was previously incorporated by reference. Applicant has done so, and therefore the Examiner must consider not only the Specification as filed but also the matter inserted into the Specification that was previously incorporated by reference.

The Amendment to the Specification of June 18, 2008 in combination with the Specification as filed provides support for each and every element of FIGs. 14-17 and the supporting text as submitted in the Amendment filed April 16, 2007. Therefore, any objections to the April 16, 2007 amendment to the specification as being new matter have been overcome. Applicant respectfully requests reconsideration and withdrawal of these objections.

Rejections under 35 U.S.C. § 112

Claims 40-53 were rejected under 35 U.S.C. § 112 ¶ 1, as failing to comply with the written description requirement. Applicant respectfully traverses.

Written Description Requirement

Applicant submits that each claimed feature satisfies the written description requirement for two reasons. First, a person of ordinary skill in the art would have understood the original specification, at the time of filing, included each feature. Second, the person of ordinary skill in the art would have understood the specification as amended, if read at the time of original filing, to include each feature.

To satisfy the written description requirement, “the disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue.” *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000). Rather, each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure, and when an explicit limitation in a claim is not present in the written description, “it must be shown that a person of ordinary skill would have understood, at the time the patent application was filed, that the description requires that limitation.” MPEP § 2163 (II)(A)(3)(b) (quoting *Hyatt v. Boone*, 146 F.3d 1348, 1353 (Fed. Cir. 1998)). See also *Ralston Purina Company v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 1576 (Fed. Cir. 1985) (upholding trial court's determination that certain claimed water content ranges in soybean meal recited in a child application were adequately supported by parent application's disclosure which lacked explicitly disclosure of the

claimed ranges because claimed ranges would have been understood by a person skilled in the art to be workable).

Applicant submits that the application as filed expressly or implicitly supports each claim limitation, and that a person of ordinary skill would have understood, at the time of filing, that the description included each claimed feature. For each claim element not expressly described, a pinpoint citation to the incorporated by reference DOCSIS standard was included in the original application. Moreover, the DOCSIS standard itself, even if it had not been incorporated or referenced, demonstrates a background knowledge possessed by the person of ordinary skill—which would have allowed the person to understand that the description included the claimed features.

Moreover, as discussed above, Applicant has “correct[ed] the improper incorporation by reference by submitting an amendment to amend the specification or drawings to include the material incorporated by reference” as required by MPEP 608.01(p) and 37 C.F.R. § 1.57(f). Therefore, Applicant no longer relies on any material improperly incorporated by reference to support the claims.

For at least these reasons, the Examiner should withdraw the rejection.

Support for Specific Features

In addition to the support for specific features cited in the Remarks section of Applicant’s June 18, 2008 Amendment, Applicant submits the following supplemental clarifications.

On page 6-7 of the Office Action, the Examiner provided specific grounds of rejection regarding the claim elements “*storing at least one first user unique parameter*

corresponding with a first carrier frequency” and “storing at least one second user unique parameter corresponding with a second carrier frequency that is different from the first carrier frequency” (as recited in claims 40-42). The Examiner asserts that because “one of ordinary skilled in the art . . . would clearly understand that the CM in the DOCSIS specification is not capable of storing more than one *set* of user unique parameters,” this claim element is not supported. (Office Action, page 7) (emphasis added). Applicant respectfully traverses.

To maintain ranging on a single channel, DOCSIS CMs store one set of user unique parameters.¹ As stated in the Specification as filed, “[c]urrently, CMs cannot change back and forth between channels seamlessly. They cannot maintain a ‘ranged’ (power level, fine frequency, timing, and even transmitter equalization) condition on more than one carrier frequency at a time.” (Specification as filed, page 14 lines 12-15). Thus previous CMs could “maintain ranging” on only one carrier frequency at a time because they could store only one set of user unique parameters.

Embodiments of the invention, however, maintain ranging “on at least two carrier frequencies, or channels; at least one channel is narrowband and at least one channel is wideband.” (Specification as filed, pg. 16, lines 34-35). “Maintaining ranging” on multiple channels means ‘remembering’ the necessary parameters for each channel thus maintaining the ability to transmit on each channel. When the Specification discusses maintaining ranging on a second frequency or channel, it is recognized that at least one

¹ “‘User unique’ parameters include power level, offset frequency and ranging offset. A complete list of ‘burst profile’ and ‘user unique’ parameters are listed in DOCSIS. (See DOCSIS section 4.2.7.)” (Specification as filed, page 13, lines 10-13). Further, the Specification as Amended recites, “User Unique Parameters include Power Level, Offset Frequency (a fine frequency tuning/adjust), Ranging Offset (microseconds), Burst Length in mini-slots (optional, changes burst to burst), and Transmit Equalizer Coefficients.” (Amendment, June 18, 2008, page 4).

second user unique parameter corresponding to that frequency is being stored. (See Specification as filed, page 14, lines 12-21; page 16, lines 33-36). Embodiments maintaining ranging on a second channel inherently store a second set of user unique parameters (i.e., “at least one second user unique parameter” as recited in the claims)—because maintaining ranging on a each channel requires storing a set of user unique parameters such as power level, offset frequency, etc., for each channel as described in the Specification.

For at least these reasons, the claimed features “*storing at least one first user unique parameter corresponding with a first carrier frequency*” and “*storing at least one second user unique parameter corresponding with a second carrier frequency that is different from the first carrier frequency*” (as recited in claims 40-42) are fully supported by the Specification as filed and as amended.

The Examiner dismissed Applicant’s previous arguments regarding the remaining claimed features “for the same rationales as noted above.” (Office Action, page 8). These remaining claimed features differ substantially from the above discussed claimed features. The Examiner, however, provided no further rationale for rejecting the citations to the Specification for these remaining claimed features as submitted in the Remarks of the June 18, 2008 Amendment. Absent more specific guidance from the Examiner, Applicant cannot further address the remainder of Examiner’s 35 U.S.C. § 112 rejection. Applicant renews all arguments regarding the remaining claimed features in the June 18, 2008 Amendment.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl
Attorney for Applicant
Registration No. 36,013

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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